ABSTRACT

This invention relates to an optical transmitter, receiver or transceiver module, and more particularly, to an optoelectronic connector. The optoelectronic connector comprises: (1) a mounting structure; (2) an array of optoelectronic devices adapted to the mounting structure, the optoelectronic devices having at least a first end; (3) an array of optical elements, the array of optical elements having at least a first end; (4) the first end of the array of optical elements proximate to the first end of the array of optoelectronic devices in such a manner that one or more optical elements is positioned relative to one or more optoelectronic devices; and (5) a heat spreader passing along a surface of a head region of the mounting structure. The mounting structure may be a flexible printed circuit board. Thermal vias or heat pipes in the head region may transmit heat from the mounting structure to the heat spreader. The heat spreader may provide mechanical rigidity or stiffness to the heat region. In another embodiment, an electrical contact and ground plane may pass along a surface of the head region so as to provide an electrical contact path to the optoelectronic devices and limit electromagnetic interference. In yet another embodiment, a window may be formed in the head region of the mounting structure so as to provide access to the head spreader. Optoelectronic devices may be adapted to the head spreader in such a manner that the devices are accessible through the window in the mounting structure.